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August 11, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**TRANSMITTAL OF SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Patent Application No. 10/767,686 filed 1/29/2004  
Applicant: Ai-Zhi Piao and Chung Shih  
Title: **MIXTURES OF VARIOUS TRIBLOCK POLYESTER  
POLYETHYLENE GLYCOL COPOLYMERS HAVING IMPROVED  
GEL PROPERTIES**

Group Art Unit: 1615  
Attorney Docket No. T8275.DIV

Sir/Madam:

Transmitted herewith for filing and pursuant to 37 C.F.R. §§ 1.56 and 1.97 is an Information Disclosure Statement. Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

- ☒ Form **PTO/SB/08A and PTO/SB/08B** list of 35 references submitted for consideration.
- ☐ Legible copies of the listed references or their relevant portions.
- ☐ Legible copies of the listed non-patent documents and foreign documents or their relevant portions are included.
- ☒ Copies of U.S. patents and/or publications are not included pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. 1.98(a)(2)(i).
- ☐ All English translations of each non-English reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

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The following are included within the Information Disclosure Statement if applicable and as required under 37 C.F.R. § 1.98:

- ☐ Concise explanation of relevance of each reference not in English and unaccompanied by an English translation.
- ☐ Statement that certain listed references not enclosed are substantially cumulative of an enclosed reference.
- ☒ Statement that certain listed references not enclosed were previously cited by or submitted to the Office in prior application no. 09/559,799, filed on 4/27/2000, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

- ☐ Statement under 37 C.F.R. § 1.97(e)(1) or (2).
- ☒ Check No. 22846, which includes the amount of \$180.00 (amount in § 1.17(p)) constituting the submission fee set forth in 37 C.F.R. § 1.17(p).

In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Statement meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 20-0100 of the undersigned.

Respectfully submitted,



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Registration No. 22,788

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MWW/WC/jmw



IN THE UNITED STATES PATENT & TRADEMARKS OFFICE

ART UNIT: 1615

EXAMINER:

APPLICANT: Piao et al

SERIAL NO.: 10/767,686

FILED: 01/29/2004

CONFRM. NO.:

FOR: MIXTURES OF VARIOUS TRIBLOCK  
POLYESTER POLYETHYLENE GLYCOL  
COPOLYMERS HAVING IMPROVED  
GEL PROPERTIES

**CERTIFICATE OF MAILING**  
**UNDER 37 CFR § 1.8**

DATE OF DEPOSIT: Aug 31, 2005

I hereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage on the date indicated above and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Larry Seck

Secretary

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form **PTO/SB/08A** and **PTO/SB/08B** which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed pursuant to:

☐ 37 C.F.R. § 1.97 (b)(1) or (3), within three months of the filing date of the application, or before a first office action on the merits, whichever occurs last;

☒ 37 C.F.R. § 1.97 (c), after a first office action on the merits, but before a Final Office Action or a Notice of Allowance, whichever occurs first, and is accompanied by either 1) a statement in accordance with 37 C.F.R. § 1.97 (e), or 2) the fee set forth in § 1.17(p); or

☐ 37 C.F.R. § 1.97 (d), after a Final Office Action or Notice of Allowance, whichever occurs first, but on or before payment of the issue fee, and is accompanied by both 1) a statement in accordance with 37 C.F.R. § 1.97(e), and 2) the fee set forth in § 1.17(p).

While no representation is made that any of these references may be "prior art" within the meaning of that term in accordance with 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently

aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

☐ A legible copy of each listed U.S. Patent or publication (or relevant portion thereof) which was not previously submitted to, or cited by, the Patent Office is enclosed pursuant to 37 C.F.R. §§ 1.97 and 1.98.

☐ A legible copy of each of the listed non-patent literature and foreign documents or their relevant portions is enclosed.

☒ Copies of cited U.S. patents and/or publications are NOT enclosed pursuant to the Official Gazette Notice, dated Aug. 5, 2003, waiving the requirement of 37 C.F.R. § 1.98(a)(2)(i).

☒ Copies of the references listed in the accompanying Form PTO/SB/08A AND PTO/SB/08B are NOT enclosed because, under 37 C.F.R. § 1.98(d), they were previously cited by or submitted to the Office in application number 09/559,799, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

For all listed references that are not either in the English language, or accompanied by a translation into English, a concise explanation of relevance as required under 37 C.F.R. § 1.98(a)(3) is enclosed attached to each.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or to credit any overpayment to Deposit Account No. 20-0100.

Dated this 31<sup>st</sup> day of August, 2005.

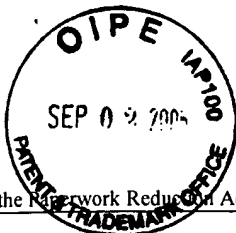
Respectfully submitted,



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Enclosure



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/767,686
Filing Date	01/29/2004
First Named Inventor	Ai-Zhi Piao
Art Unit	1615
Examiner Name	
Attorney Docket Number	T8275.DIV

Sheet 1 of 1

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,438,253	3/20/1984	Casey et al.	
		4,526,938	7/2/1985	Churchill et al.	
		4,652,441	3/24/1987	Okada et al.	
		4,745,160	5/17/1988	Churchill et al.	
		4,892,903	1/9/1990	Himes	
		4,938,763	7/3/1990	Dunn et al.	
		5,100,669	3/31/1992	Hyon et al.	
		5,278,202	1/11/1994	Dunn et al.	
		5,324,519	6/28/1994	Dunn et al.	
		5,330,768	7/19/1994	Park et al.	
		5,643,605	7/1/1997	Cleland et al.	
		5,674,192	10/7/1997	Sahatjian et al.	
		5,702,717	12/30/1997	Cha et al.	
		5,814,340	9/29/1998	Labrie et al.	
		5,939,485	8/17/1999	Bromberg et al.	
		6,004,573	12/21/1999	Rathi et al.	
		6,117,949	9/12/2000	Rathi et al.	

**FOREIGN PATENT DOCUMENTS**

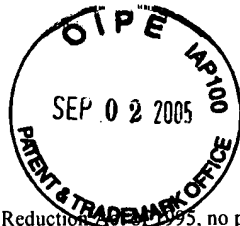
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		WO 93/24150	12-09-1993	Zeneca Limited		
		EP 0258780	03-09-1988	American Cyanamid Company		
		EP 0224389	06-03-1987	Raychem Corporation		
		EP 0092918	11-02-1983	Imperial Chemical Industries PLC		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/08B (08-03)

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<b>Substitute for form 1449/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/767,686
		Filing Date	01/29/2004
		First Named Inventor	Ai-Zhi Piao
		Art Unit	1615
Examiner Name			
Sheet 1 of 2		Attorney Docket Number	T8275.DIV

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	AS Sawhney and JA Hubbell, <u>Rapidly Degraded Terpolymers of dl-Lactide, Glycolide, and ε-Caprolactone with Increased Hydrophilicity by Copolymerization with Polyethers</u> , J. Biomed. Mat. Res., 24, 1397-1411 (1990).	
	2	AS Sawhney, CP Pathak, and JA Hubbell, <u>Bioerodible Hydrogels Based on Photopolymerized Poly(ethylene glycol)-c9-poly(α-hydroxy acid) Diacrylate Macromers</u> , Macromolecules, 26(4), 581-589: 1993.	
	3	T Matsuda, N Motomura, and T Oka, <u>Angiopeptin as a Potent Inhibitor of Myointimal Hyperplasia: Systemic Injection and Local Administration via Impregnation in a Biodegradable Polymeric Gel</u> , ASAIO Journal, M512-M517(1993).	
	4	L Martini et al., <u>Micellisation and Gelation of Triblock Copolymer of Ethylene Oxide and ε-Caprolactone, CLE, CL in Aqueous Solution</u> , J. Chem Soc. Faraday Trans., 90(13), 1961-1966: 1994.	
	5	TP Johnston and SC Miller, <u>Inulin Diposition Following Intramuscular Administration of an Inulin/Poloxamer Gel Matrix</u> , J. Parenteral Science & Technology, 43(6), November-December 1989.	
	6	TP Johnston et al., <u>Sustained Delivery of Interleukin-2 from a Poloxamer 407 Gel Matrix Following Intraperitoneal Injection in Mice</u> , Pharmaceutical Research 9(3), 1992.	
	7	K Morikawa et al., <u>Enhancement of Therapeutic Effects of Recombinant Interleukin 2 on a Transplantable Rat Fibrosarcoma by the Use of a Sustained Release Vehicle, Pluronic Gel</u> , Cancer Research, 47 pp. 37-41, January 1, 1987.	
	8	TP Johnston and SC Miller, <u>Toxicological Evaluation of Poloxamer Vehicles for Intramuscular Use</u> , J. Parenteral Science and Technology, 39(2), March-April 1985.	
	9	L. Youxin, C Volland, and T Kissel, <u>In-Vitro Degradation and Bovine Serum Albumin Release of the ABA Triblock Copolymers Consisting of poly (L(+)-lactic acid-co-glycolic acid) A-Blocks attached to Central Polyoxyethylene B-Blocks</u> , J. Controlled Release, 32: 1994.	
	10	L. Youxin and T Kissel, <u>Synthesis and Properties of Biodegradable ABA Triblock Copolymers Consisting of poly (L-lactic acid) or poly (L-lactic-co-glycolic acid) A-Blocks attached to Central Poly(oxyethylene) B-Blocks</u> , J. Controlled Release, 27, 1993.	

Examiner Signature	Date Considered
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\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet	2		2	Attorney Docket Number	T8275.DIV

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	11	KA Fults and TP Johnston, <u>Sustained-Release of Urease from a Poloxamer Gel Matrix</u> , J. Parenteral Science & Technology, 44(2), March-April 1990.	
	12	Byeongmoon Jeong, et al, " <u>Biodegradable Block Copolymers as Injectable Drug-delivery Systems</u> ", Letters to Nature, Vol. 388, 28 August 1997.	
	13	A Chenite, et al, " <u>Novel Injectable Neutral Solutions of Chitosan Form Biodegradable Gels In Situ</u> ", Biomaterials, 21 (2000) 2155-2161.	
	14	E. Ruel-Gariepy, et al, " <u>Thermosensitive Chitosan-based Hydrogel Containing Liposomes for the Delivery of Hydrophilic Molecules</u> ", Journal of Controlled Release, 82 (2002) 373-383.	

Examiner Signature		Date Considered	
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